IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	RONALD L. BOGGS et al.	) Group Art Unit:
Serial No.:	10/825,506	) 2619
Filed:	April 15, 2004	) Examiner: Mahmoudzadeh
For:	REAL-TIME MONITORING, ANALYSIS, AND FORECASTING OF TRUNK GROUP USAGE	)

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

REAL PARTY IN INTEREST

The real party in interest is AT&T Intellectual Property I, L.P., an entity owning certain assets of BellSouth Intellectual Property Corporation, the assignee of record.

RELATED APPEALS AND INTERFERENCES

There are no pending appeals or interferences related to this appeal.

STATUS OF CLAIMS

Claims 2 and 12 have been canceled.

Claims 11 and 13-20 stand finally rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claim 11 stands finally rejected under 35 U.S.C. § 112, second paragraph.

Claims 1, 3, 6, 8-11, 13, 16 and 18-20 stand finally rejected under 35 U.S.C. § 102(b) as being unpatentable over Kline.

Claims 4 and 14 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Kline in view of Fitzgerald.

Claims 5 and 15 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Kline in view of Erlang.

Claims 7 and 17 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Kline.

STATUS OF AMENDMENTS

There have been no amendments filed after the final rejection mailed January 25, 2008.

SUMMARY OF CLAIMED SUBJECT MATTER

A concise explanation of the subject matter defined in each of the independent claims involved in the appeal is provided below.

Independent claim 1 recites a method of managing deployed trunk circuit capacity, the method: monitoring trunk circuits to collect traffic usage data (paragraphs [0035] and [0039]; Figure 4, element 437 and Figure 3, element 303); analyzing the traffic usage data by computing averages of traffic usage data over a period of time (paragraph [0035]; Figure 3, element 311; paragraphs [0046]-[0050]); and forecasting trunk circuit capacity requirements based at least in part on the averages (paragraphs [0039] and [0054]-[0059]; Figure 4, elements 433 and 435 and Figure 8); wherein the averages are computed for a cluster of switches that is a community of interest with a locality of communication access pattern such that there is less communications traffic across a boundary between the cluster of switches and other switches not in the cluster than communications traffic between switches in the cluster (paragraph [0049]).

Independent claim 11 recites a system that facilitates managing deployed trunk circuit capacity, the system comprising: a data collector configured to monitor trunk circuits to collect traffic usage data (paragraphs [0035] and [0039]; Figure 4, element 437 and Figure 3, element 303); data analysis logic configured to analyze the traffic usage data (paragraph [0035]; Figure 3, element 311) by computing averages of traffic usage data over a period of time (paragraphs [0046]-[0050]); and forecasting logic configured to forecast trunk circuit capacity requirements based at least in part on the time-moving

averages (paragraphs [0039] and [0054]-[0059]; Figure 4, elements 433 and 435 and Figure 8); wherein the averages are computed for a cluster of switches that is a community of interest with a locality of communication access pattern such that there is less communications traffic across a boundary between the cluster of switches and other switches not in the cluster than communications traffic between switches in the cluster (paragraph [0049]).

The above exemplary embodiments are discussed with respect to the aforementioned independent claims by way of example only and are not intended to in any way limit the scope of these claims.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL[1]

Claims 1, 3, 6, 8-11, 13, 16 and 18-20 rejected under 35 U.S.C. § 102(b) as being unpatentable over Kline.

Claims 4 and 14 rejected under 35 U.S.C. § 103 as being unpatentable over Kline in view of Fitzgerald

Claims 5 and 15 rejected under 35 U.S.C. § 103 as being unpatentable over Kline in view of Erlang.

Claims 7 and 17 rejected under 35 U.S.C. § 103 as being unpatentable over Kline. This rejection is traversed for the following reasons.

ARGUMENT

I. Rejection of claims 1, 3, 4, 8, 9, 16, 23, 28 and 29

Claims 1, 3, 6, 8-11, 13, 16 and 18-20 were rejected under 35 U.S.C. § 102(b) as being unpatentable over Kline. This rejection is traversed for the following reasons.

Claim 1 recites "analyzing the traffic usage data by computing averages of traffic usage data over a period of time; and forecasting trunk circuit capacity requirements based at least in part on the averages; wherein the averages are computed for a cluster of switches that is a community of interest with a locality of communication access pattern

[1] The rejections under 35 U.S.C. §§ 101 and 112 can be routinely resolved by amendment, and are not appealed.

such that there is less communications traffic across a boundary between the cluster of switches and other switches not in the cluster than communications traffic between switches in the cluster." Support for this feature is found on at least paragraph [0049] of Applicants' specification. As described, this grouping of switches in clusters allows for more efficient forecasting. The cluster of switches is defined by communication traffic inter-cluster versus intra-cluster.

Kline fails to teach these features. Kline teaches collecting average usage information for trunk groups (column 2, lines 6-22), but fails to teach grouping switches into clusters for the purposes of computing averages for the cluster. The Examiner cites to Figure 10 of Kline and states that "it is inherent that if cluster of switches are connected to each other Fig. 10." Figure 10 of Kline illustrates a network map displayed at a network control center. As described in column 9, lines 18-47, the NCC can monitor status of trunk groups between nodes. The Examiner's position is that each node "inherently" includes a cluster of switches as defined in claim 1. Applicants respectfully disagree.

The legal requirements for inherency are set forth in MPEP § 2112. This section states "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). 'To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" In the present case, it is not inherent in Kline to have a cluster of switches at each node in, for example, Figure 10. This is not an inherent property that must be present, but rather a design consideration that may be altered. Thus, the Examiner's reliance on inherency is improper.

Further, the term "cluster" in claim 1 is described as "a cluster of switches that is a community of interest with a locality of communication access pattern such that there is less communications traffic across a boundary between the cluster of switches and other switches not in the cluster than communications traffic between switches in the cluster." Cluster does not simply mean "plural." Apparently, the Examiner is using the interpretation that cluster means more than one, when this is clearly not the case based on the language of claim 1.

Further, assuming *arugendo*, that Kline somehow does teach clusters of switches at each node of Figure 10, Kline does not monitor traffic within the cluster. Claim 1 clearly states that "averages are computed for a cluster of switches." Kline teaches computing traffic data between the nodes of Figure 10, not **within** the nodes. Thus, Kline certainly cannot anticipate claim 1.

Lastly, it is noted that the rejection is under 35 U.S.C. § 102, meaning that all the claim elements must be present in the reference for the rejection to be proper. In view of the above remarks, it is clear that Kline fails to teach the elements of claim 1 and that the Examiner's reliance on inherency is misplaced. Thus, the rejection is improper.

For at least the above reasons, claim 1 is patentable over Kline. Claims 3, 6, and 8-10 variously depend from claim 1 and are patentable over Kline for at least the reasons advanced with reference to claim 1. Claim 11 recites features similar to those discussed above with reference to claim 1 and is patentable over Kline for at least the reasons advanced with reference to claim 1. Claims 13, 16 and 18-20 depend from claim 11 and are considered patentable for at least the same reasons.

II. Rejection of claims 4 and 14

Claims 4 and 14 were rejected under 35 U.S.C. § 103 as being unpatentable over Kline in view of Fitzgerald. This rejection is traversed for the following reasons.

Fitzgerald was relied upon for disclosing measuring traffic as a base unit of bandwidth, but fails to cure the deficiencies of Kline discussed above with reference to claims 1 and 11. Claims 4 and 14 depend from claims 1 and 11, respectively, and are patentable over Kline in view of Fitzgerald for at least the reasons advanced with reference to claims 1 and 11.

III. Rejection of claims 5 and 15

Claims 5 and 15 were rejected under 35 U.S.C. § 103 as being unpatentable over Kline in view of Erlang. This rejection is traversed for the following reasons.

Erlang was relied upon for disclosing a metric that is based on a count of a plurality of connections multiplied by a duration of each connection, but fails to cure the deficiencies of Kline discussed above with reference to claims 1 and 11. Claims 5 and 15 depend from claims 1 and 11, respectively, and are patentable over Kline in view of Erlang for at least the reasons advanced with reference to claims 1 and 11.

IV. Rejection of claims 7 and 17

Claims 7 and 17 were rejected under 35 U.S.C. § 103 as being unpatentable over Kline. This rejection is traversed for the following reasons.

The Examiner relied on "design choice" in finding that it would have been obvious to compute a plurality of forecasts using a plurality of models. This analysis of Kline fails to cure the deficiencies of Kline discussed above with reference to claims 1 and 11. Claims 7 and 17 depend from claims 1 and 11, respectively, and are patentable over Kline for at least the reasons advanced with reference to claims 1 and 11.

V. Conclusion

In view of the foregoing, it is respectfully submitted that the appealed rejections by reversed.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

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CLAIM APPENDIX

1. A method of managing deployed trunk circuit capacity, the method:

monitoring trunk circuits to collect traffic usage data;

analyzing the traffic usage data by computing averages of traffic usage data over a period of time; and

forecasting trunk circuit capacity requirements based at least in part on the averages;

wherein the averages are computed for a cluster of switches that is a community of interest with a locality of communication access pattern such that there is less communications traffic across a boundary between the cluster of switches and other switches not in the cluster than communications traffic between switches in the cluster.

3. The method of claim 1, wherein the cluster comprises at least one switch and trunk circuits to at least two other switches.

4. The method of claim 1, wherein the traffic usage data comprises a metric that is based upon multiples of a base unit of bandwidth.

5. The method of claim 1, wherein the traffic usage data comprises a metric that is based upon a count of a plurality of connections multiplied by a duration of each of the connections.

6. The method of claim 1, wherein the averages are computed at least weekly.

7. The method of claim 1, wherein the forecasting computes a plurality of forecasts using a plurality of models.

8. The method of claim 1, wherein the forecasting allows manual override of at least one model parameter.

9. The method of claim 8, wherein the forecasting uses a graphical user interface (GUI) for entering the manual override of the at least one model parameter.

10. The method of claim 1, wherein the forecasting displays forecast output through a graphical user interface (GUI).

11. A system that facilitates managing deployed trunk circuit capacity, the system comprising:

a data collector configured to monitor trunk circuits to collect traffic usage data;

data analysis logic configured to analyze the traffic usage data by computing averages of traffic usage data over a period of time; and

forecasting logic configured to forecast trunk circuit capacity requirements based at least in part on the time-moving averages;

wherein the averages are computed for a cluster of switches that is a community of interest with a locality of communication access pattern such that there is less communications traffic across a boundary between the cluster of switches and other switches not in the cluster than communications traffic between switches in the cluster.

13. The system of claim 12, wherein the cluster comprises at least one switch and trunk circuits to at least two other switches.

14. The system of claim 11, wherein the traffic usage data comprises a metric that is based upon multiples of a base unit of bandwidth.

15. The system of claim 11, wherein the traffic usage data comprises a metric that is based upon a count of a plurality of connections multiplied by a duration of each of the connections.

16. The system of claim 11, wherein the averages are computed at least weekly.

17. The system of claim 11, wherein the logic configured to forecast computes a plurality

of forecasts using a plurality of models.

18. The system of claim 11, wherein the logic configured to forecast allows manual override of at least one model parameter.

19. The system of claim 18, wherein the logic configured to forecast uses a graphical user interface (GUI) for entering the manual override of the at least one model parameter.

20. The system of claim 11, wherein the logic configured to forecast displays forecast output through a graphical user interface (GUI).

EVIDENCE APPENDIX

Not Applicable

RELATED PROCEEDINGS APPENDIX

Not Applicable